## ASSESSING THE BRAIN'S COGNITIVE STAGE

TBI might require a variety of recovery therapies as well as possibly throughout the patient's life. Medical professionals and you will be faced with assisting your loved one with overcoming cognitive issues, as well as physical issues. Before any recommendations can be made, you need to know these two medical scales first: The Glasgow Coma Scale and the Rancho Los Amigos Scale which are assessed by a medical professional:

#### GLASGOW COMA SCALE

When someone is injured, medical professionals need to be able to assess them to provide proper treatment. The assessment method used for brain injuries is the Glasgow Coma Scale. **Closed brain injuries** happen when you receive a violent hit to the head. This results in the brain being shaken or hitting the sides of your skull, causing bruising on the brain or the tearing of blood vessels or brain tissue. Closed brain injuries are usually caused by car accidents, falls, and sometimes sports. **Penetrating brain injuries** happen when something breaks through the skull and enters the brain, such as a bullet. The Glasgow Coma Scale measures eye response, verbal response, and motor response. This assessment happens immediately after injury and may be assessed by an EMT on the way to the hospital, or immediately upon arrival at the ER. Patients will be assessed repeatedly to check for progress. Here is a simple illustration.<sup>i</sup>



TO LEARN MORE, YOU CAN ALSO GO TO "WHAT IS THE GLASGOW COMA SCALE?" AT <u>What Is the Glasgow Coma Scale? (webmd.com)</u>"

# OR YOU CAN WATCH THE FOLLOWING VIDEO: "GLASGOW COMA SCALE - MED-SURG NURSING/LECTURIO."



Glasgow Coma Scale - Med-Surg Nursing | Lecturio

51K views • 3 years ago

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In this video "Glasgow Coma Scale" you will learn about: > the factors that are assessed in a nursing neurologic assessment ...

https://www.youtube.com/watch?v=5r72MeObEXw

## RANCHO LOS AMIGOS SCALE

The clinical process of assessing cognitive and behavioral functions after a TBI is called the "Rancho Los Amigos Scale (RLAS)". This helps medical professionals to assess a starting point to recommend therapies. We found this scale very helpful at home as well, as we could glean information from it to understand what stage our loved one was going through during the recovery process. Our loved one started at Level I and is currently between Levels IX and X. Remember, there is always hope and much depends on how the brain is stimulated during the recovery process.!!! Age does play a role, but the saying in our family is "With God's help, we are going to help our loved one to get to the highest level possible!" Note here that each stage comes with new challenges that can be very taxing. Stay consistent and strong! (Pray a lot!) And ask medical professionals for a lot of input.

## Level I: No Response: Total Assistance

• No response to external stimulation.

## Level II: Generalized Response: Total Assistance

- Responds inconsistently and non-purposefully to external stimulation.
- Responses are often the same regardless of the stimulation.

## Level III: Localized Response: Total Assistance

• Responds inconsistently and specifically to external stimulation.

- Responses are directly related to stimulation. For example, a patient withdraws or vocalizes pain when touched.
- Responds more to familiar people (friends and family) versus strangers.

# Level IV: Confused/Agitated: Maximal Assistance

- The individual is in a hyperactive state with bizarre and non-purposeful behavior.
- Demonstrates agitated behavior that originates more from internal confusion than the external environment.
- Little short-term memory.

# Level V: Confused, Inappropriate Non-Agitated: Maximal Assistance

- Shows increase in consistency with following and responding to simple commands.
- Responses are non-purposeful and random to more complex commands.
- Behavior and verbalization are often inappropriate, and individual appears confused and often makes things up.
- If action or tasks are demonstrated individual can perform but does not initiate tasks on their own.
- Memory is severely impaired and learning new information is difficult.
- Different from level IV in that individual does not demonstrate agitation to internal stimulation. However, they can show agitation to unpleasant external stimulation.

# Level VI: Confused, Appropriate: Moderate Assistance

- Able to follow simple commands consistently.
- Able to retain learning for familiar tasks they performed pre-injury (brushing teeth, washing face) however unable to retain learning for new tasks.
- Demonstrates increased awareness of self, situation, and environment but unaware of specific impairments and safety concerns.
- Responses may be incorrect secondary to memory impairments but appropriate to the situation.

# Level VII: Automatic, Appropriate: Minimal Assistance for Daily Living Skills

- Oriented in familiar settings.
- Able to perform daily routine automatically with minimal to absent confusion.
- Demonstrates carry over for new tasks and learning in addition to familiar tasks.
- Superficially aware of one's diagnosis but unaware of specific impairments.
- Continues to demonstrate lack of insight, decreased judgment, and safety awareness.

- Beginning to show interest in social and recreational activities in structured settings.
- Requires at least minimal supervision for learning and safety purposes.

## Level VIII: Purposeful, Appropriate: Stand by Assistance

- Consistently oriented to person, place, and time.
- Independently carries out familiar tasks in a non-distracting environment.
- Beginning to show awareness of specific impairments and how they interfere with tasks, however, requires standing by assistance to compensate.
- Able to use assistive memory devices to recall daily schedule.
- Acknowledges other's emotional states and requires only minimal assistance to respond appropriately.
- Demonstrates improvement of memory and ability to consolidate past and future events.
- Often depressed, irritable and with a low frustration threshold.

## Level IX: Purposeful, Appropriate: Stand by Assistance on Request

- Able to shift between different tasks and complete them independently.
- Aware of and acknowledges impairments when they interfere with tasks and able to use compensatory strategies to cope.
- Unable to independently anticipate obstacles that may arise secondary to impairment.
- With assistance able to think about consequences of actions and decisions.
- Acknowledges the emotional needs of others with stand by-assistance.
- Continues to demonstrate depression and low frustration threshold.

## Level X: Purposeful, Appropriate: Modified Independent

- Able to multitask in many different environments with extra time or devices to assist.
- Able to create own methods and tools for memory retention.
- Independently anticipates obstacles that may occur as a result of impairments and take corrective actions.
- Able to independently make decisions and act appropriately but may require more time or compensatory strategies.
- Demonstrate intermittent periods of depression and low frustration threshold when under stress.
- Able to appropriately interact with others in social situations.

FOR MORE INFORMATION YOU CAN ALSO LOOK AT THE FOLLOWING INFORMATION: RANCHO LOS AMIGOS LEVEL OF COGNITIVE FUNCTIONING SCALE, <u>https://www.physio-pedia.com/</u> Rancho\_Los\_Amigos\_Level\_of\_Cognitive\_Functioning\_Scale <sup>v</sup>

## OR YOU CAN WATCH THIS VIDEO ON THE SUBJECT VI:



Rancho Scale: Review the Rancho Los Amigos Scale Levels of Cognitive Function with me!

14K views • 2 years ago

The OT Minute

Rancho Scale: Review the Rancho Los Amigos Scale Levels of Cognitive Function with me! In today's OT Minute we review the ...

https://www.youtube.com/watch?v=oaFtOkhhiMM

<sup>v</sup> Phsysiopedia. 2023. "Rancho Los Amigos Level of Cognitive Functioning Scale". Physiopedia.Com. Retrieved
September 12, 023. https://www.physio-pedia.com/Rancho\_Los\_Amigos\_Level\_of\_Cognitive\_Functioning\_Scale
<sup>vi</sup> The OT Minute. 2022. "Rancho Scale: Review the Rancho Los Amigos Scale Levels of Cognitive Function with me!"
YouTube. Retrieved September 12, 2023. https://www.youtube.com/watch?v=oaFtOkhhiMM

<sup>&</sup>lt;sup>i</sup> Dr. Jehesh. 2022. "Glasgow Coma Scale". Facebook. Retrieved September 12, 2023.

https://www.facebook.com/100078193866633/posts/glasgow-coma-scale-gcs-glasgowcomascale-medical-science-medicaleducation/181711667778628/

<sup>&</sup>lt;sup>ii</sup> Jabeen Begum, 2022. "What is the Glasgow Coma Scale?". WebMD. Retrieved September 12, 2023. https://www.webmd.com/brain/what-is-the-glasgow-coma-scale.

<sup>&</sup>lt;sup>III</sup> Lecturio Nursing. 2020. "Glasgow Coma Scale – Med-Surg Nursing / Lecturio". Lecturio Nursing on YouTube. Retrieved September 12, 2023. https://www.youtube.com/watch?v=5r72MeObEXw

<sup>&</sup>lt;sup>iv</sup> Katherine Lin, Michael Wroten. 2022. "Ranchos Los Amigos". NIH - National Library of Medicine. Retrieved September 12, 2023. https://www.ncbi.nlm.nih.gov/books/NBK448151/